

Frederick STENTIFORD
Serial No. 10/581,027
June 25, 2009

AMENDMENTS TO THE DRAWINGS:

Applicant submits concurrently herewith eight (8) sheets of drawings illustrating Figs. 1-8 showing proposed changes thereto in red ink, accompanied by eight (8) sheets of replacement drawings illustrating Figs. 1-4, 5a, 5b, 5c, 6a, 6b, 6c, 6d, 7a, 7b, 8a and 8b incorporating such amendments.

Attachments: Replacement Sheets: 8
Annotated Sheets Showing Changes: 8

Frederick STENTIFORD
Serial No. 10/581,027
June 25, 2009

REMARKS/ARGUMENTS

Reconsideration of this application is respectfully requested.

As requested, a more descriptive title has been effected by the above amendment.

In response to the rejection of claim 21 under 35 U.S.C. §101, this claim has been amended so as to claim a computer-readable storage medium, etc., and thus clearly lies within the ambit of statutory subject matter even under current USPTO guidelines.

In response to the rejection of claim 20 under 35 U.S.C. §101, this claim has also been amended so as to be in more traditional "means-plus-function" format – including memory means for storing an image, as well as computer means including a programmed computer connected for access to said memory means and memory storing a program configured, when executed, to perform the method of claim 1.

Contrary to the Examiner's comment, the specification does not indicate that the "invention may be embodied as pure software" at page 2, lines 2-5. Indeed, this cited portion of applicant's specification is actually describing the hardware of an exemplary embodiment in Fig. 1 – which includes, *inter alia*, a computer-readable memory segment 602 storing an executable computer program for processing an image, etc.

Furthermore, as those skilled in the art appreciate, there is no meaningful existence for "pure software". To the undersigned's understanding, what is sometimes commonly referred to as "software" must be physically manifested in physical things (e.g., magnetic storage media, organized arrays of doped semiconductor devices, etc.), which contain unique sequences of structured executable computer program instruction code – in machine-readable form accessible to a computer CPU so they can be loaded into an instruction register, etc., so as to cause a particularly unique *modus operandi* for

Frederick STENTIFORD
Serial No. 10/581,027
June 25, 2009

the computer as it is executing that particular computer program "software". There is nothing "soft" about the physical embodiment of the computer program instruction code structure that is required to define a meaningful and useful computer "program" or "software". Indeed, the physical structures required to contain such code structures are typically "hard" (e.g., a "hard disk"). It is unclear what might be "unpure" or "pure" about the "software" at issue.

Structure corresponding to the recited means-plus-function elements is depicted, for example, in applicant's exemplary embodiment of Fig. 1 and described in the specification (e.g., see the paragraph bridging pages 1 and 2, as well as the first several paragraphs on page 2).

The rejection of claims 1-19 under 35 U.S.C. §101 as allegedly failing to define statutory subject matter is also respectfully traversed. Those skilled in the relevant art would clearly not "reasonably" interpret the applicant's claimed methodology as involving a series of steps completely performed mentally, verbally or without a machine. Especially when properly construed in the context of the applicant's accompanying disclosure, it is clear that the method being claimed is an automated computer-implemented method utilizing a programmed computer to effect certain processes. In any event, the claims have been amended above so as to more particularly "tie" the claimed method to another statutory class of subject matter (e.g., a machine). It is also respectfully noted that in the course of practicing the claimed method, underlying subject matter (e.g., magnetizable media, doped semiconductor elements, etc.) is necessarily transformed to a different state. Indeed, from its very inception, a programmed computer has been referred to as a "state machine" precisely because, at each successive clock cycle, the state of many physical elements throughout the computer changes.

Frederick STENTIFORD
Serial No. 10/581,027
June 25, 2009

The rejection of claim 20 under 35 U.S.C. §112, first and second paragraphs, is also respectfully traversed.

Claim 20 is in compliance with 35 U.S.C. §112, sixth paragraph – and has, in any event, been amended above so as to include more particular recitations of particular apparatus structure, as suggested by the Examiner.

In response to the rejection of claims 1-21 under the doctrine of obviousness-type double patenting *vis-à-vis* claims 1-24 of U.S. Patent No. 6,934,415, applicant herewith submits an appropriate terminal disclaimer to simply obviate and moot this ground of rejection. Accordingly, no further discussion of the Examiner's assertions is required at this time.

The rejection of claims 1-21 under 35 U.S.C. §102 as allegedly anticipated by Brett '471 is respectfully traversed.

The passage in Brett cited by the Examiner teaches a system in which a given pixel value is compared to its neighbors and, under certain conditions, is replaced by an average value. However, the claims of the present application require that two groups of plural pixels (picture elements) be compared and, when a "match" (within limits) is found, replacing the color value of one of the pixels in one group in dependence on the color value of at least a corresponding pixel in the other group. Comparing groups of pixels in this way performs a filtering function on an image which allows background information to be reduced in prominence, while yet preserving important features. In particular, it tends to remove artifacts which exhibit some similarity to their surroundings (see page 5, line 20).

Simply replacing a given pixel with the average value of surrounding pixels as in the cited prior art would, it is believed, just average out detail, regardless of its similarity to the surroundings. In effect, this might provide a noise smoothing filter (e.g., see

Frederick STENTIFORD
Serial No. 10/581,027
June 25, 2009

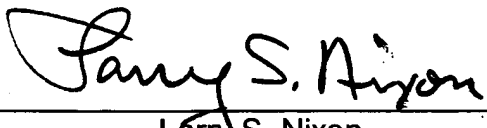
applicant's output noise filter 120 described in the specification at page 3, lines 22-24). However, it does not provide significant reduction in color variability as provided by applicant's group-pixel approach – e.g., so as to significantly increase the scope for compression and/or to reduce perceptible image artifacts.

Given such fundamental deficiencies of Brett with respect to independent claim 1, it is not necessary at this time to discuss additional deficiencies of this reference with respect to other aspects of the rejected claims. Suffice it to note that, as a matter of law, it is impossible for any reference to anticipate a claim unless it teaches each and every feature of that claim.

Accordingly, this entire application is now believed to be in allowable condition, and a formal notice to that effect is earnestly solicited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 
Larry S. Nixon
Reg. No. 25,640

LSN:lef

901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100

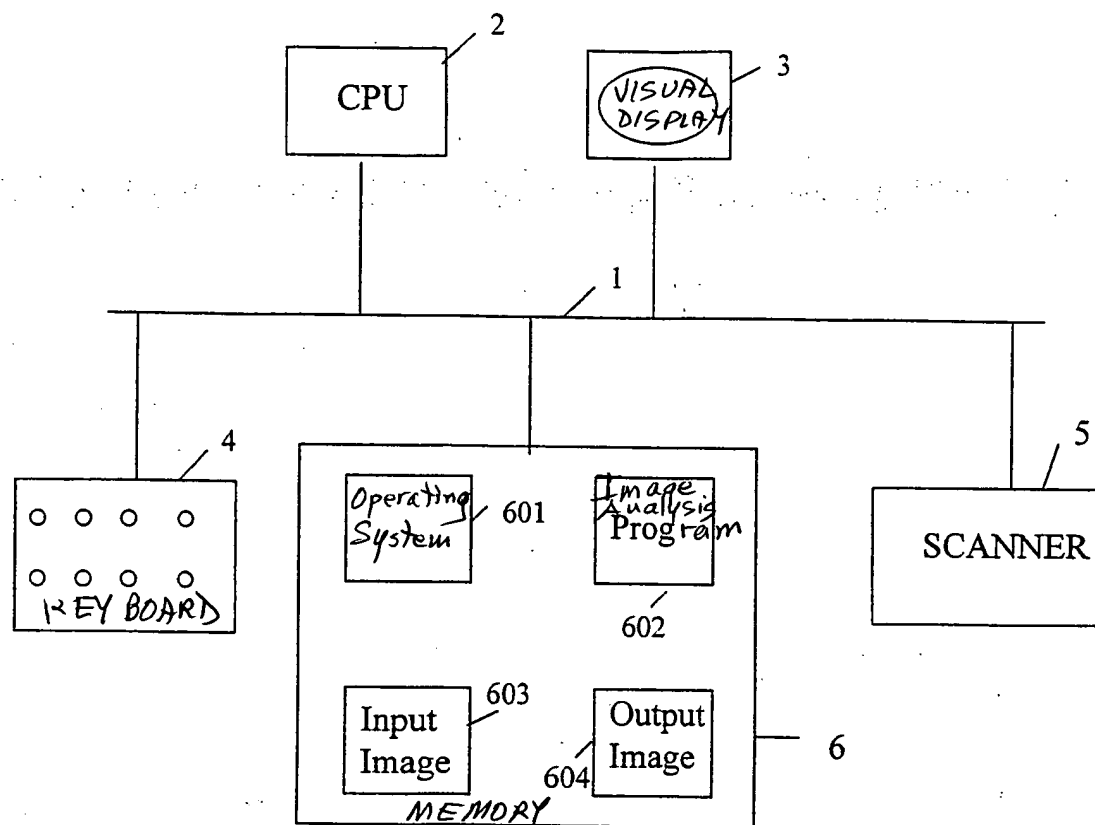


Figure 1

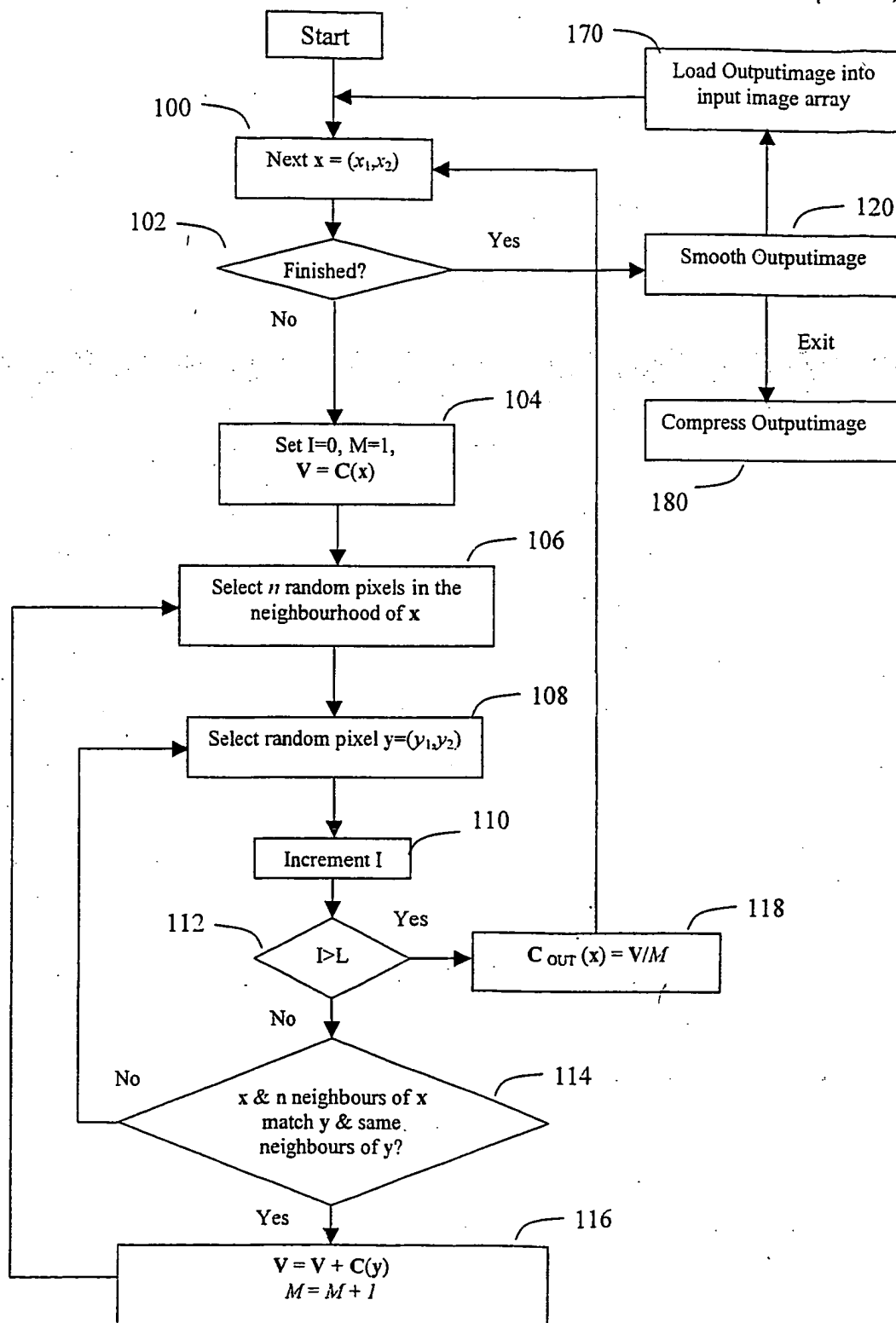


Figure 2

3/8

ANNOTATED MARKED UP DRAWINGS
FOR SN 10/581,027

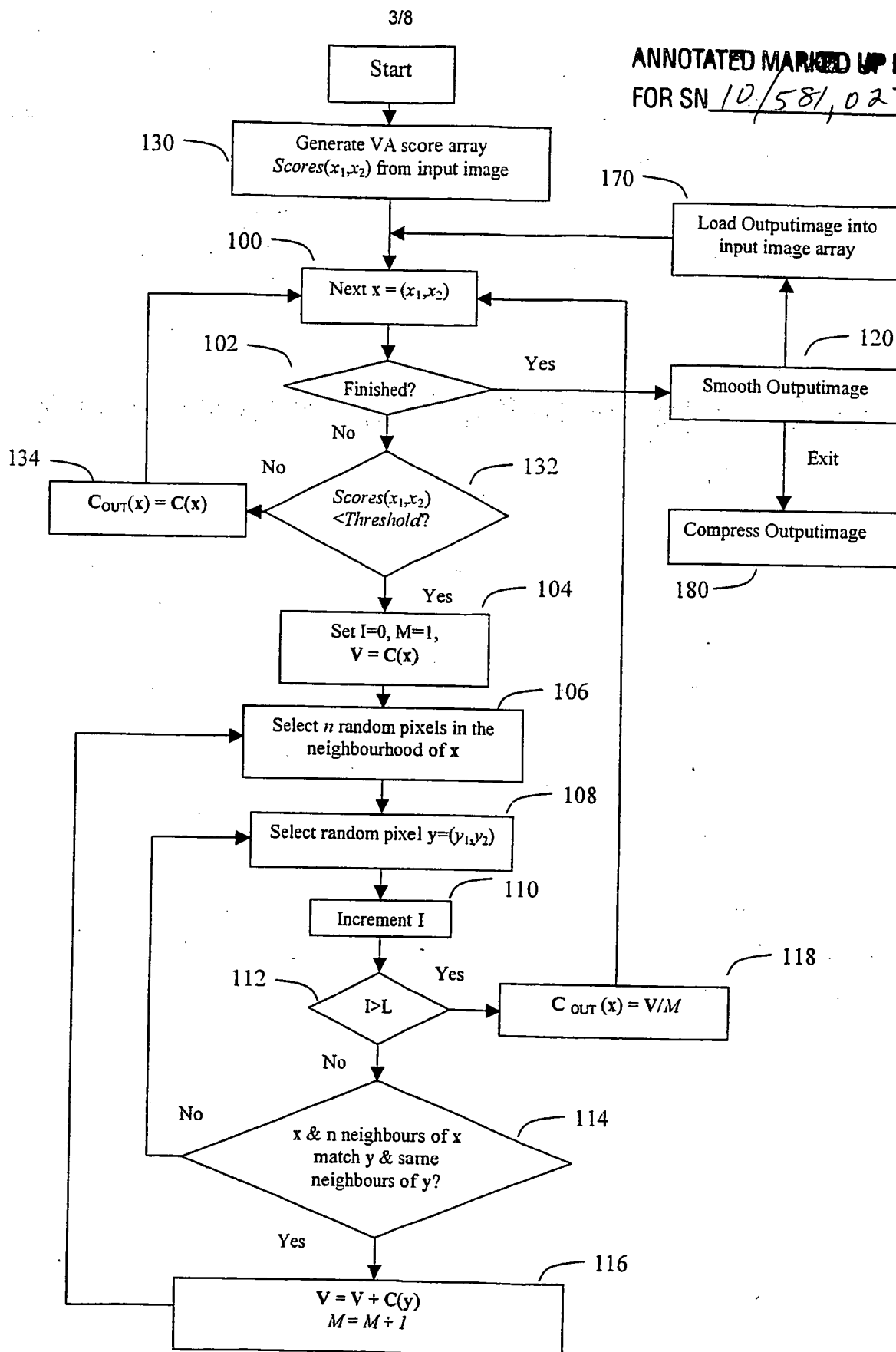


Figure 3

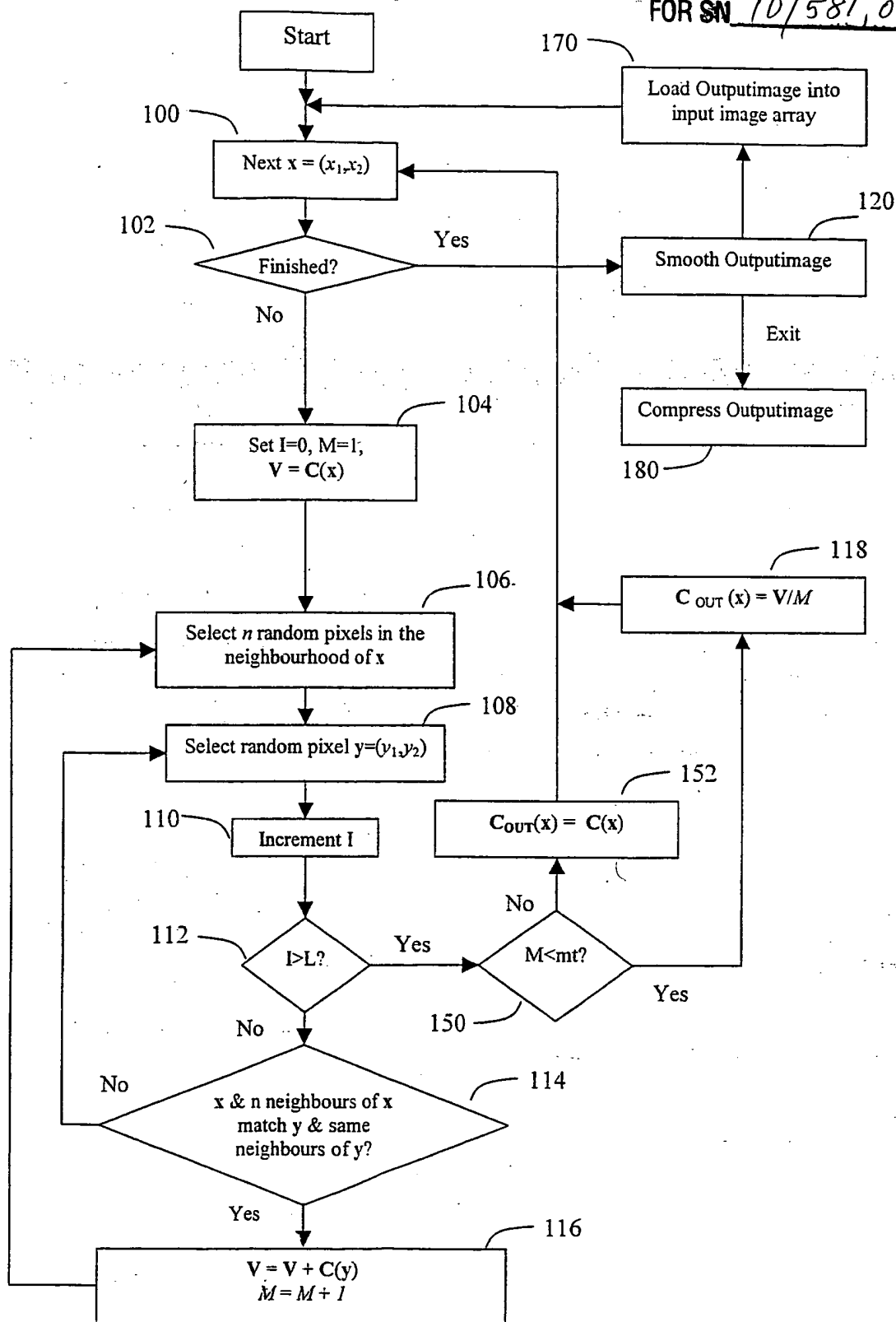
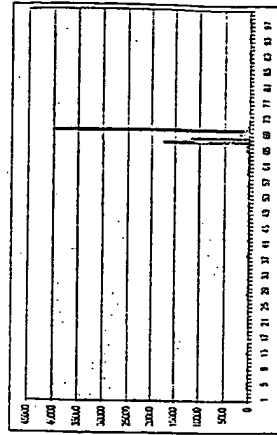


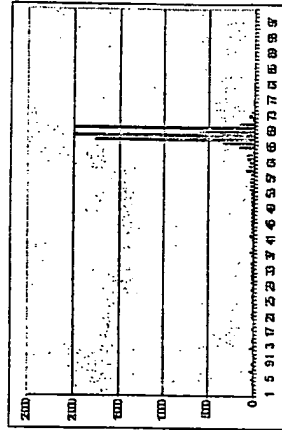
Figure 4

5/8



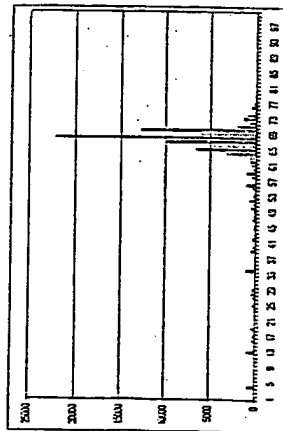
Gif - 75037 bytes

Fig. 5a



JPEG - 13719 bytes

Fig. 5b



JPEG - 10853 bytes

Fig. 5c

Figure 5

ANNOTATED MARKED UP DRAWINGS
FOR SN 10/581,027



Fig. 6b^f JPEG = 10158 bytes

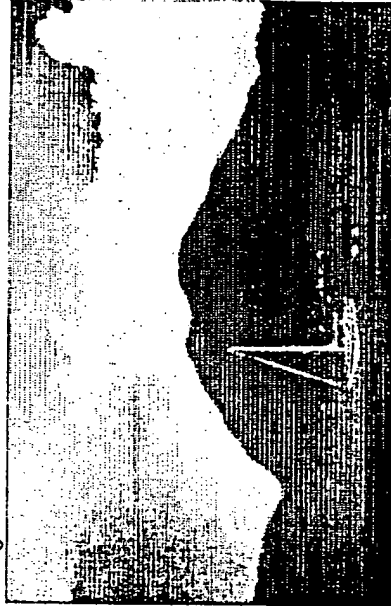


Fig. 6d^f JPEG = 8317 bytes



Fig. 6a^f JPEG = 13361 bytes

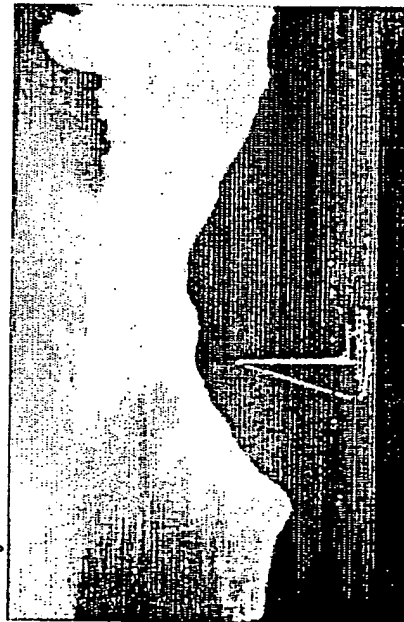


Fig. 6c^f JPEG = 8881 bytes

Figure 6

ANNOTATED MARKED UP DRAWINGS
FOR SN 10/581,027

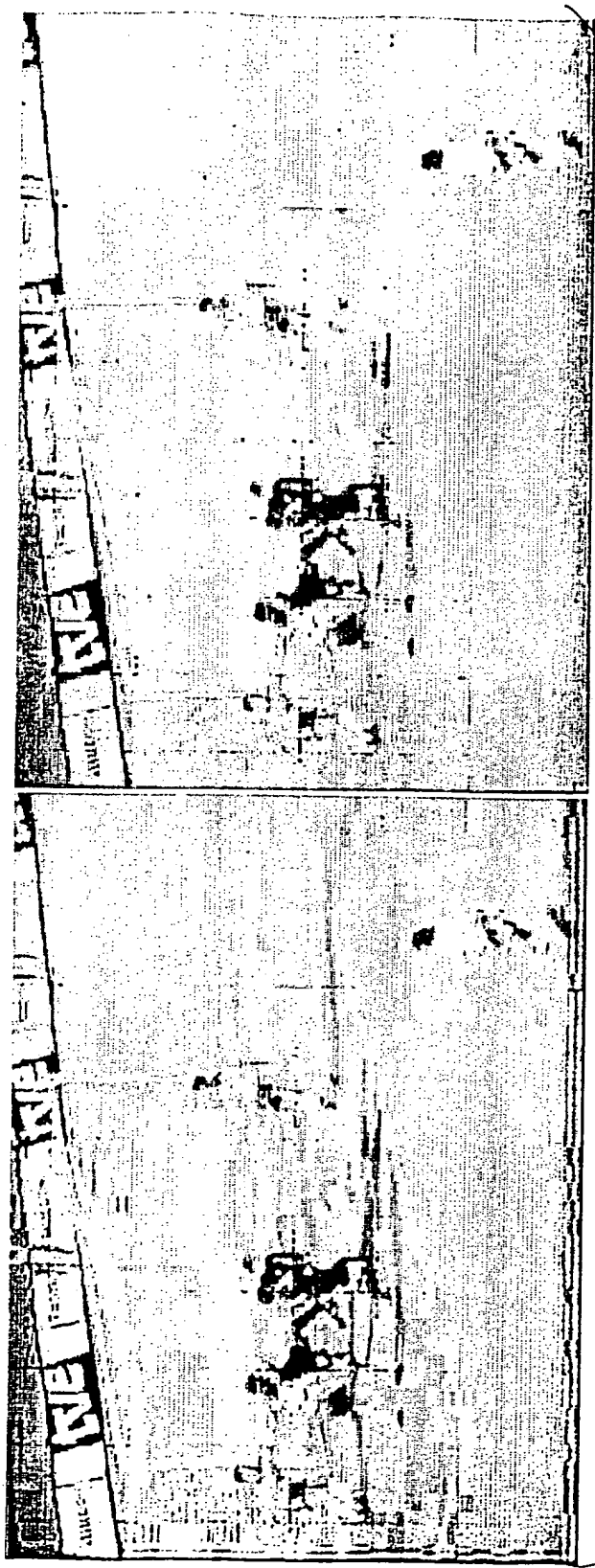


Fig. 7b

Fig. 7a

Figure 7

ANNOTATED MARKED UP DRAWINGS
FOR SN 10/581,027



Processed image

Fig. 8b



Original

Fig. 8a

Figure 8